

IN THE SPECIFICATION:

At page 2, please amend the paragraph beginning at line 33, as follows:

Fig. 1a is 4, a fragmentary longitudinal section through an electric motor, with a carbon brush holder disposed on its collector and with means of a first embodiment for protecting the armature shaft pivot bearing from soiling;

At page 3, please add the following new paragraph at line 4:

Fig. 1b is a magnified portion of the fragmentary longitudinal section depicted in Fig. 1a;

At page 3, please amend the paragraph beginning at line 4, as follows:

Figs. 2a-1 through 2e-1 depict 2a through 2e, various positions of a carbon brush as the holder for the carbon brushes is being pulled off from the armature shaft of the motor; ~~and~~

At page 3, please add the following new paragraph at line 8:

Figs. 2a-2 through 2e-2 depict magnified portions of the various positions depicted in Figs. 2a-1 through 2e-1, respectively;

At page 3, please amend the paragraph beginning at line 8, as follows:

Fig. 3a depicts 3, a fragmentary longitudinal section through an electric motor,

with a carbon brush holder disposed on its collector and with means of a second embodiment for protecting the armature shaft pivot bearing from soiling; and[[.]]

At page 3, please add the following new paragraph at line 13:

Fig. 3b is a magnified portion of the Fig. 3a fragmentary longitudinal section.

At page 3, please amend the paragraph beginning at line 15, as follows:

In Fig. 1a, 4,~~1,~~ a portion of an electric motor of the kind used preferably in hand-operated electrical tools, is shown. Since the motor is constructed rotationally symmetrically with respect to its longitudinal axis, only half of the electric motor is shown in Fig. 1a[[1]]. In a known manner, the motor has a rotatable armature 1, whose armature shaft, on its end remote from the armature 1, is supported in a pivot bearing 3. A cylindrical collector 4 which rotates with the armature shaft 2 is disposed on the armature shaft 2, between the armature 1 and the pivot bearing 3 for the armature shaft 2. The collector 4 is provided with electrical contact by at least two carbon brushes, of which only one carbon brush 5 is shown in the sectional view in Fig. 1a[[1]]. The carbon brushes have the function of establishing an electrical connection from an external power connection to the collector of the motor. The carbon brushes 5 are disposed in a holder 6 and are pressed by a spring force in the radial direction against the jacket face of the cylindrical collector 4. The spring force is exerted by a spring 7, which rests on the

face end, remote from the collector 4, of the carbon brushes 5 and exerts a contact pressure in the direction of the jacket face of the collector 4. The holder 6 for the carbon brushes 5 is releasably fixed to the housing 8 of the motor. The releasable fixation is preferably effected by means of a detent element 9, which is present in the holder 6 and can be snapped into the housing 8. A special receptacle chamber 10, into which the holder 6 for the carbon brushes 5 is insertable, may be integrally formed onto the housing 8.

At page 4, please amend the paragraph beginning at line 10, as follows:

An armature disk 11 is disposed on the armature shaft 2, between the collector 4 and the pivot bearing 3. This armature disk 11 serves to protect the pivot bearing 3 for the armature shaft 2 against the entry of material abraded from the carbon brushes 5 as well as from particles (such as drilling dust and drillings), which are aspirated in the process of operating an electrical power tool. This armature disk 11 has a larger diameter than the collector 4 and therefore protrudes radially past the collector 4, as is readily apparent from the magnified portion of the Fig. 1a fragmentary longitudinal section that is depicted in Fig. 1b.

At page 4, please amend the paragraph beginning at line 28, as follows:

As already described above, the holder 6 with the carbon brushes 5 is releasably secured to the housing 8. If the holder 6 is to be removed from the motor so that the carbon brushes can be changed, then the detent element 9 of

the holder 6 is released, and the holder is pulled off the collector 4 in the axial direction (direction of the arrow X) of the armature shaft 2. In Figs. 2a-1 through 2e-12a through 2e, five different positions of the carbon brush 5 are shown during the process of pulling off the holder 6 for the carbon brushes 5. For the sake of simplicity, each of the Figs. 2a-1 through 2e-12a through 2e shows only one carbon brush 5 with the spring 7 holding it down, without the holder 6. Figs. 2a-2 through 2e-2 depict magnified portions of the various positions depicted in Figs. 2a-1 through 2e-1, respectively.

At page 5, please amend the paragraph beginning at line 7, as follows:

In the view shown in Figs. 2a-1 and 2a-2~~Fig. 2a~~, the holder is moved in the axial direction, so that the brushes 5 slide over the collector 4 in the direction of the armature disk 11. Finally, the carbon brushes 5 meet the armature disk 11, which protrudes radially past the collector 4. This situation is shown in Figs. 2b-1 and 2b-2~~Fig. 2b~~. Because of the larger diameter of the armature disk 11 in comparison with the collector 4, this would prevent the holder 6 with the carbon brushes 5 from being pulled farther in the X direction and thus from being removed entirely from the motor. Because the armature disk 11, on its side toward the carbon brushes 5, is provided with a chamfer 14, which decreases from the outer diameter of the armature disk 11 to the carbon brushes 5, the carbon brushes slide along this chamfer 14 over the armature disk 11, and in the process the

carbon brushes 5 are thrust radially outward counter to the force of the spring 7.

At page 5, please amend the paragraph beginning at line 24, as follows:

The enlarged details of the magnified portions shown in Figs. 2a-2 through 2e-2 depict ~~2a through 2e~~ each show the position of the carbon brushes 5 relative to the armature disk 11 and to the bearing dome 12. Figs. 2c-1 and 2c-2 show ~~Fig. 2c shows~~ the position of the carbon brushes 5 once they have been slipped over the chamfer 14 of the armature disk 11 as far as the outermost point of the armature disk 11. After a further forward motion in the X direction of the holder 6 with the carbon brushes 5, the carbon brushes slide over the topmost point of the armature disk 11, until they meet the bearing dome 12. This situation is shown in Figs. 2d-1 and 2d-2~~Fig. 2d~~. The bearing dome 12, or more specifically the face end toward the carbon brushes 5 of the cylindrical wall 13 of the bearing dome 12, is likewise provided with a chamfer 15. This chamfer of the bearing dome 12 decreases in diameter from the outermost diameter of the cylindrical wall 13 in the direction of the carbon brushes 5. Thus even a bearing dome 12 that has a somewhat larger diameter than the armature disk 11 is no hindrance to the continued motion of the holder 6 with the carbon brushes 5. That is, the carbon brushes 5 slide over the chamfer 15 of the bearing dome and are thrust outward, counter to the force of the spring 7, until the carbon brushes 5 finally rest on the surface of the cylindrical wall 13 of the bearing dome 12. Finally, the holder 6 with the carbon brushes 5 disposed in it can be pulled all the way off, over the surface

of the cylindrical wall 13 of the bearing dome 12. The chamfers 14 and 15 on the armature disk 11 and bearing dome 12 can extend rectilinearly, as shown in the drawings, or can have a curved course.

At page 7, please amend the paragraph beginning at line 6, as follows:

The exemplary embodiment shown in Fig. 3a, including a magnified portion shown in Fig. 3b, [[3 ]] differs from the exemplary embodiments ~~embodiment~~ shown in Figs. 1a, 1b, [[1 ]] and 2a-1, 2a-2 2a through 2e-1. 2e-2 2e only in the design of the means that protect the pivot bearing 3 against dirt. All the other details of the exemplary embodiment in Figs. 3a, 3b Fig. 3 correspond to those of the exemplary embodiment of Figs. 1a, 1b, [[1 ]] and 2a-1, 2a-2 2a through 2e-1. 2e-2 2e and are identified by the same reference numerals. In the exemplary embodiment of Figs. 3a and 3b Fig. 3, the bearing dome 12 protrudes, with its cylindrical wall 131, axially in the direction of the collector 4, past the armature disk 11. A chamfer 15 over which the holder 6 can slide is therefore required only on the face end of the cylindrical wall 131 of the bearing dome 12 oriented toward the holder 6 having the carbon brushes 5.